U.S. Army Corps of Engineers, Honolulu District and Sacramento District Formerly Used Defense Sites (FUDS) Program

# PROPOSED PLAN FOR AREA R MUNITIONS RESPONSE SITE

Former Waikoloa Maneuver Area, Island of Hawaii, Hawaii Formerly Used Defense Sites Project No. H09HI035918

This **Proposed Plan** is presented by the U.S. Army

Corps of Engineers (the Corps) to allow the public the opportunity to review and comment on the **Preferred** 

Alternative for Area R, a Munitions Response Site located within the former Waikoloa Maneuver Area. Area

Area R is located on the northwest side of the Big Island

of Hawaii in the County of Hawaii, approximately 30

miles north of Kailua-Kona in the South Kohala District. Area R is composed of the Waimea-Kohala Airport,

Figure 1 shows the location of Area R within the former

supporting facilities, and surrounding agricultural land.

#### Dates to Remember: PLEASE MARK YOUR CALENDAR

#### PUBLIC COMMENT PERIOD:

#### July 15, 2015 to August 14, 2015

The Corps will accept verbal and written comments on the Proposed Plan during the public comment period. Comments may be sent to:

> USACE Honolulu District Attn: Walter Nagai Building 230 Fort Shafter, Hawaii 96858-5440 (808) 835-4089

#### **PUBLICMEETING:**

#### July 15, 2015 at 6:00 p.m.

A public meeting will be held at the Waimea Elementary School, 1225 Mamalahoa Hwy, Kamuela, HI 96743 to explain the Proposed Plan and the alternatives presented in the Feasibility Report. Verbal and written comments will be accepted at the meeting.

#### FOR MORE INFORMATION:

Project documents are available for review in the information repository located at the Thelma Parker Memorial Library, 67-1209 Mamalahoa Hwy, Kamuela, HI 96743.

Although there are numerous munitions response sites within the former Waikoloa Maneuver Area, this Proposed Plan provides the rationale for the Preferred Alternative for Area R. This Proposed Plan will present a summary of background information for Area R, describe the remedial alternatives evaluated in the Feasibility Study; identify the Preferred Alternative presented for public comment; and provide information on the public participation process for the selection of the final remedy for Area R.

This Proposed Plan contains terms (in **bold letters**) used for environmental remediation and the overall **Military Munitions Response Program**. These terms are described in the Glossary found at the end of this document.

#### Figure 1: Area R Site Location

 Marine Rd
 Marine Rd
 Marine Rd

 Marine Rd
 Marine Rd



July 2015

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INTRODUCTION

R is also known as Project 18.

Waikoloa Maneuver Area.

The Corps is the executing agent for the Formerly Used Defense Sites (FUDS) Program, which is responsible for environmental restoration of real property that was owned by, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary that was transferred from Department of Defense control prior to October 17, 1986. In executing the FUDS program, the Corps carries out response actions to address releases of hazardous substances and **Munitions and Explosives of Concern** or **Munitions Constituents** contamination. The Corps conducts environmental response activities at FUDS on behalf of the Department of Defense.

The Corps is the lead agency for investigating, reporting, deciding and implementing remedial action at Area R. Representatives from the Hawaii Department of Health, the lead regulatory agency for this project, reviewed the Remedial Investigation Report and agreed with its conclusions and recommendations.

A **Remedial Investigation** was conducted in 2014 to determine the nature and extent of potential munitions and munitions constituents within Area R. The Remedial Investigation determined that there was an explosive hazard present within Area R; therefore, a Feasibility Study was conducted to evaluate remedial alternatives to address to potential munitions at Area R resulting from former military use. The Feasibility Study presented three alternatives: 1) No Further Action; 2) Land Use Controls; and 3) Surface/Subsurface Munitions Removal with Land Use Controls. This Proposed Plan provides brief descriptions of these three alternatives and discusses the rationale for supporting the Preferred Alternative for Area R: implementation of Surface and Subsurface Munitions Removal supported by Land Use Controls.

# PUBLIC INVOLVEMENT PROCESS

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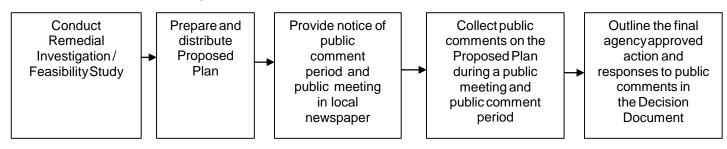
The Corps is required under the **Comprehensive Environmental Response**, **Compensation**, and **Liability Act (CERCLA)** to issue this Proposed Plan and seek public comment and participation under Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan. This Proposed Plan summarizes information that can be found in greater detail in the Feasibility Study (United States Army Corps of Engineers, 2014) and other documents contained in the Administrative Record file.

Following presentation of the Proposed Plan at the public meeting, verbal and written comments are received at the meeting and verbal and written comments will be accepted during the public comment period. All comments received are carefully considered and documented before an alternative is chosen. The location of the meeting, the date and time, and the address of the information repository are presented on the first page of this document.

The Proposed Plan, Remedial Investigation Report and the Feasibility Study Report are a part of the Area R **Administrative Record** file that contains all the documents used in making environmental cleanup decisions. The Administration Record file is found in the site information repository located at the Thelma Parker Memorial Library, 67-1209 Mamalahoa Hwy, Kamuela, HI 96743.

The final decision on the chosen remedy for Area R will be presented in a **Decision Document**. The Corps' responses to public comments on this Proposed Plan will appear in the "Responsiveness Summary" section of the Decision Document. The flow chart shown below in Figure 2 summarizes the various steps in the development and approval process for the Area R Decision Document.





# SITE BACKGROUND

#### SITE HISTORY

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Area R is located within the former Waikoloa Maneuver Area. The former Waikoloa Maneuver Area (also known as Camp Tarawa) was acquired by the U.S. Navy in 1943 through a licensing agreement with Parker Ranch, for use of 91,000 acres as a World War II Era Military Training Camp. Approximately 467 acres of the former Waikoloa Maneuver Area was used for tents and Quonset huts, most of the remaining acreage was used for maneuvers and military training exercises. Additional acreage was acquired and the former Waikoloa Maneuver Area was expanded to 123,000 acres.

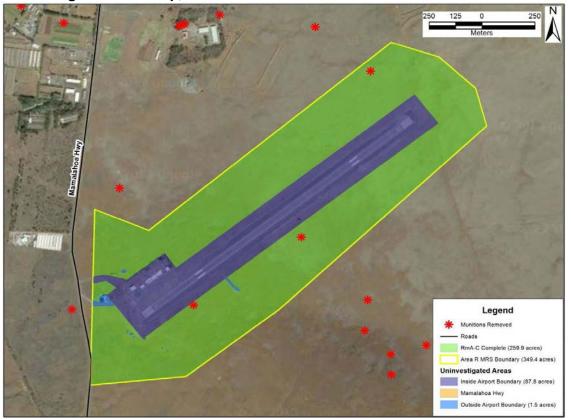
In September 1946, the original 91,000 acres of the former Waikoloa Maneuver Area were transferred back to the Parker Ranch. The remaining acreage was transferred at later dates, with use in some areas until 1953.

#### SITE DESCRIPTION

Area R is located approximately one mile south of the community of Waimea. The Pu'u Pa Local Training Area (not included in the FUDS program) is located to the west of Area R. [Note: The current airport location is not the location of the original abandoned Kamuela Airport (formerly known as Bordelon Field), which was inactivated in August 1953 and located on the west side of Mamalahoa Highway.]

Area R is comprised of soils derived from basaltic lava flows. Surface soils, which range from 15 inches to 25 inches thick in the southwestern areas, are comprised of a cobbly medial silt loam. In the northeastern areas, the soil ranges from 42 inches to 52 inches thick. The soil is comprised of a very fine sandy loam.

Area R includes 349.4 acres. Of this acreage, 259.9 acres have been subject to munitions removal action; whereas, 89.5 acres remain uninvestigated. The uninvestigated acreage is primarily located inside the airport boundary or covered by obstructions. Figure 3 presents a site map of Area R.



#### Figure 3: Site Map, Area R of the Former Waikoloa Maneuver Area

#### **Previous Investigations and Munitions Removal Actions**

A number of early investigations have been performed within the former Waikoloa Maneuver Area. This section summarizes only those investigations which included the property within the boundaries of Area R. While other investigations provide additional background information and framework for the site, they are excluded from this summary (additional information is included in the Remedial Investigation Report and the Administrative Record file).

#### **Engineering Evaluation / Cost Analysis**

An Engineering Evaluation/Cost Analysis evaluated the former Waikoloa Maneuver Area in three phases. Area R was evaluated in Phase II, where the boundaries of Area R were created based on land uses and estimated explosive hazard present.

During fieldwork for the Engineering Evaluation/Cost Analysis, no munitions items were found within Area R. However, munitions were identified in close proximity to Area R. The Phase II Engineering Evaluation/Cost Analysis Hazard Assessment concluded that Area R had a low explosive hazard.

#### **Area R Munitions Removal Actions**

Area R is located in close proximity to Area J, which has a high explosive hazard rating. Area J surrounds Area R to the north and northeast. In 2009 and 2012, munitions removal actions were performed in high hazard areas near Area R to address the immediate need to protect the public from the munitions suspected to be present. These would have been munitions that were used by soldiers during historical training, but which did not fully explode. These residual munitions could still contain explosive materials and therefore, potentially present a hazard to people who encounter them.

The 2009 and 2012 removal actions included 259.9 acres of Area R. During the removal actions, three munitions were removed from the surface and the subsurface soil of Area R. As illustrated in Figure 3, the munitions were removed from portions of Area R that are located outside of the airport boundary. These munitions included a 2.36-inch rocket, a 60-millimeter illumination mortar, and a hand grenade (high explosive).

#### **Remedial Investigation**

The purpose of a Remedial Investigation is to determine what contamination may still be present at a site, at what locations, and in what amounts. This is known as characterizing the nature and extent of contamination. During the Remedial Investigation of Area R, the contamination resulting from military use was evaluated. The Remedial Investigation summarized and evaluated the available data from the Area R removal actions to make a recommendation regarding the potential explosive hazard that could be present within Area R and to provide a recommendation about the extent of the potential explosive hazard remaining within Area R.

The Remedial Investigation confirmed that the munitions removed from Area R were located outside of the airport fence; however, the areas inside the airport fence boundary and 1.5 acres of land outside the fencing were uninvestigated. The Remedial Investigation Report recommended that Area R proceed to a Feasibility Study and be managed as two assessment areas: the Removal Action Areas and the Uninvestigated Areas. The Removal Action Areas were defined as those portions of Area R that had undergone a munitions removal action. The Uninvestigated Areas were defined as those portions of Area R that had not received munition removal action. The Remedial Investigation Report concluded that there was no unacceptable risk to humans or the environment from munitions constituents potentially present in Area R.

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#### **CURRENT AND FUTURE LAND USE**

The current land uses within Area R is commercial, industrial, and construction. Potential human receptors include construction workers, commercial workers, industrial workers, and site visitors. Structures present include the Waimea-Kohala Regional Airport and support facilities. No residences are present within Area R.

#### **CONTAMINATION SOURCES**

The potential sources of contamination in Area R are munitions that remain from the former military use of the site. The types of munitions documented in Area R include a 2.36-inch rocket warhead, a 60-millimeter illumination mortar, and a MKII hand grenade (high explosive).

#### **CONTAMINATED MEDIA**

Media that may be potentially contaminated with munitions are the surface soil and subsurface soil in Area R. The Remedial Investigation determined no evidence that groundwater contamination is present. No surface water or sediment is present in Area R.

# SCOPE AND ROLE OF RESPONSE ACTION

The proposed remedial strategy to address any potentially remaining munitions within Area R reflects the community interest and the Corps' desire to effectively reduce the potential for munitions-related accidents. Area R has limited access to the public. The pathways for exposure to an explosive hazard within Area R are surface and subsurface activities from construction/industrial/commercial workers and site visitors. Exposure areas include the unpaved portions of the uninvestigated areas. However, since the unpaved acreage has been regularly mowed for years, the probability of exposure to potential surface munitions is low. Any residual potential explosive hazard is suspected to be limited to the subsurface.

# SUMMARY OF SITE RISKS

Based on the findings of the Remedial Investigation and previous investigations at Area R, the following summary of site risks is presented:

- Munitions and Explosives of Concern: Three unexploded ordnance items were found within Area R: a 2.36-inch rocket warhead, a 60-millimeter illumination mortar, and a MKII hand grenade (high explosive). A total of 561 pounds of munitions debris were removed from Area R during the two removal actions. The munitions were found outside the fenced airport boundary. An additional seven munitions items were found within 0.25 miles of the Area R border. Munitions have been found to a depth of 34 inches below ground surface within the former Waikoloa Maneuver Area. The potential exists for similar munitions to be present within the uninvestigated portions of Area R. No discarded military munitions or chemical warfare materiel were found.
- Munitions Constituents Samples were collected to determine if metals or explosives in the soil from munitions previously present were above the Hawaii Department of Health's screening levels. The samples were evaluated for explosives and metals found in the munitions. The aquifer beneath Area R was evaluated by sampling groundwater. The analysis determined no explosives were present in the soil. The concentrations of metals detected did not pose unacceptable risk to human health or ecological receptors. The Remedial Investigation Report recommended that munitions constituents do not need to be evaluated further within Area R. Consequently, munitions constituents are not addressed in this Proposed Plan.

As a result of the Remedial Investigation, it has been determined that an unacceptable explosive hazard exists within Area R. Significant portions of the Area R have undergone munitions removal actions and the explosive hazard from munitions and explosives of concern (MEC) has been significantly reduced in those areas. However, due to limitations of current technology, the high iron content of the soil, and the irregular interface between the relatively young lava and the overlying soil, there is no way of totally

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eliminating unacceptable risk with a munitions removal action. There is still a residual risk that an explosive hazard remains within the portions of Area R which have received munitions removal as well as the portions of Area R which have not undergone a removal action. The level of risk of receptor exposure to an explosive hazard in Area R is dependent upon the use of the site and anticipated depth of intrusive activity within a specific area. Those portions of Area R that have undergone a previous removal action would pose less risk than those areas that have not been undergone a munitions removal action. To more efficiently address the explosive hazard at Area R from remaining munitions, the site has been divided into assessment areas as follows:

**Removal Action Areas:** The Removal Action Areas encompasses 259.9 acres of Area R. This acreage has undergone munition removal actions. The potential of receptor exposure to an explosive hazard has been reduced in these portions of Area R, but has not been eliminated.

**Uninvestigated Areas:** The Uninvestigated Areas of Area R encompasses 89.5 acres. Within the Uninvestigated Areas, the same types of munitions that were found in the Removal Actions Areas may be present. These munitions may be present in surface and subsurface soils to a depth of 34 inches below ground surface. For the Feasibility Study, the Uninvestigated Areas of Area R were grouped and evaluated based upon land use and the depth of intrusive activity anticipated, as follows:

- Acreage within airport fenced boundary. This includes approximately 88 acres, composed of runway pavement, existing structures (buildings, roads etc.), and unpaved surfaces within the fenced runway area. Due to fencing, public access is limited. Potential intrusive activity within this area include: construction and/or utility work (limited to 0-6 feet below ground surface). The potential for intrusive activity is low and therefore, the probability of human receptors encountering munitions is low.
- **1.5 acres outside the airport fencing**. This acreage is primarily covered by pavement and structures. Potential intrusive activities include construction work to an anticipated depth of up to 6 feet below ground surface or to bedrock. The potential for intrusive activity is low and therefore, the probability of human receptors encountering munitions is low.

As a result of site risk documented in the Remedial Investigation, a remedial action objective was developed and remedial alternatives for Area R were evaluated in the Feasibility Study.

# **REMEDIAL ACTION OBJECTIVES**

To address the munitions hazard that remains within Area R, a remedial action objective has been established. The remedial action objective is to reduce the explosive hazard to human health and the environment due to the presence of munitions that may remain within Area R (i.e., mortars, rockets, and hand grenades) such that future exposures of receptors (construction/industrial/commercial workers and site visitors) to the explosive hazard can be determined as negligible.

# SUMMARY OF REMEDIAL ALTERNATIVES

The following remedial alternatives were evaluated for the Area R Uninvestigated Areas:

### ALTERNATIVE 1 – NO ACTION

"No Action" involves no active response or controls to locate, remove, dispose of or limit the exposure to any munitions present within the site. The Corps would assume no responsibility for public awareness or education concerning the potential for the presence of munitions within the site. No action would be taken to reduce the known munitions hazard. This alternative is used in the evaluation of other alternatives to provide a baseline for comparison.

The "No Action" alternative assumes continued use of the site in its present state. The "No Action" alternative would not inform users of the hazard present onsite. If the potential exposure hazards associated with the site are compatible with current and future developments in the area, then "No Action" may be warranted.

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#### ALTERNATIVE 2 – LAND USE CONTROLS

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Land Use Controls are physical, legal, administrative and other mechanisms used to restrict access and property use. They also use public awareness to inform land owners and users of hazards present. Land Use Controls are coordinated with landowners, regulatory agencies, and local authorities. For FUDS sites, where a land use restriction is part of restoration activities, the Land Use Controls must be clearly defined, designed, planned, and coordinated with the state and county.

Land Use Controls appropriate for Area R would primarily consist of educational programs. Fencing would not be considered since the area near the airport runway is already fenced and the public is denied access.

The proposed educational controls include the following:

- An annual letter and fact sheets notifying employers and site workers of the potential explosive hazard present in the area, along with steps to take if potential munitions are found.
- Provide notification/information in contract documents and through the "dig permit" process.
- Continued work with the County to give deed notification for property owners with information on former site use as a live-fire maneuver area.

A Land Use Controls Implementation Plan would be prepared with input from the public institutions that would have authority to implement the program. The Plan will provide specific details on a program that will primarily be focused on public awareness of the hazards presented. Some of the Land Use Controls mentioned above would require the cooperation of the County and community to implement. The County and schools have shown a willingness to participate in Land Use Control program.

# ALTERNATIVE 3 – SURFACE AND SUBSURFACE MUNITION REMOVAL (UNINVESTIGATED AREAS) AND LAND USE CONTROLS (ENTIRE AREA R)

Under Alternative 3, Surface and Subsurface Munition Removal would be performed in the uninvestigated areas that are not covered by pavement or structures (43 acres of the uninvestigated acreage). No further munitions removal is recommended in the areas which have previously undergone munitions removal (46.5 acres of the uninvestigated acreage). In addition to the surface and subsurface removal action, Land Use Controls (as described in Alternative 2) would implemented for Area R (259.9 acres).

Under Alternative 3, the Corps would:

- Remove all identifiable munitions items found on the surface (not expected) and subsurface of the uninvestigated areas which are not covered by pavement or structures.
- Not remove potential munitions covered by structures or roads. No further munitions removal would be completed in the regions of Area R which have already undergone a munitions removal action.
- Destroy munitions items found that have an explosive hazard by demolition. After confirming no explosive hazard remains, the resulting debris would be sent off-island to a metals recycler.
- Coordinate with the County to keep site user's notified that unexploded ordnance was previously found in the area.

Although not considered part of an alternative, Five-Year Reviews are required by the National Contingency Plan when a remedial action is selected that results in hazards remaining at the site above levels that allow for unlimited use and unrestricted exposure, 40 CFR 300.430(f)(4)(ii), and their purpose is to ensure that the remedy implemented continues to minimize explosives safety risks and remains protective of human health, safety, and the environment.

Table 1 summarizes the plan associated with Alternative 3 for Area R.

Acreage	Area	Solution		
43	Area R - Uninvestigated Areas not covered by pavement or structures	Surface/SubsurfaceMunitionsRemoval (plusEducationalawareness programs)		
46.5	Area R - Uninvestigated Areas beneath pavement and structures	Educational awareness programs		
259.9	Area R - Regions Which Have Undergone Munitions Removal Action	Educational awareness programs		

# **EVALUATION OF ALTERNATIVES**

Seven criteria and two additional modifying criteria (nine total) were used to evaluate each of the munitions response alternatives, individually and against each other, to select a remedy. Evaluation by these nine criteria are required by the National Contingency Plan. This section profiles the relative performance of each alternative against the seven criteria, noting how it compares to the other options under consideration. The nine evaluation criteria are discussed below. The detailed "Comparative Screening of Response Alternatives" can be found in the Feasibility Study Report. Table 2 provides a summary of the evaluation criteria which are also described below.

Group	Criteria			
Threshold Criteria (requirements that each alternative must meet to be eligible for selection as the preferred alternative)	<ol> <li>Overall Protection of Human Health and the Environment</li> <li>Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)</li> </ol>			
Balancing Criteria (used to form the basis for comparison among alternatives that meet the threshold criteria)	<ol> <li>Long-Term Effectiveness and Permanence</li> <li>Reduction of Mobility, Toxicity, or Volume through Treatment</li> <li>Short-Term Effectiveness</li> <li>Implementability</li> <li>Cost</li> </ol>			
Modifying Criteria (used to modify aspects of the preferred alternative when preparing the Decision Document)	<ol> <li>8. State Acceptance</li> <li>9. Community Acceptance</li> </ol>			

Table 2:	Nine Criteria for	Detailed Anal	ysis of Alternatives
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# Overall Protection of Human Health and the Environment determines whether an

alternative eliminates or sufficiently reduces, and controls threats to humans and the environment.

**Compliance with Applicable or Relevant and Appropriate Requirements** determines if the alternatives meet the criteria, standards, or other requirements from the federal environmental statutes that have been determined to be applicable or relevant and appropriate to this site and the proposed alternatives, or whether a waiver is justified.

**Long-Term Effectiveness and Permanence** considers the ability of an alternative to protect humans and the environment over time.

**Reduction of Toxicity, Mobility, or Volume through Treatment** evaluates if an alternative reduces the harmful effects of contaminants, their ability to move in the environment, and the amount of contamination present.

**Short-Term Effectiveness** considers the length of time needed to implement an alternative and the risks the alternative poses to workers, residents and the environment during implementation.

**Implementability** considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.

**Costs** includes estimated capital and annual operations and maintenance costs, as well as present worth cost. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent.

**Modifying Criteria** (State/Community Acceptance) The public comment period ensures the public has an opportunity to express opinions about the preferred alternatives. Their comments are considered when selecting the best alternative. In the final selection process, these modifying criteria (what state officials and the public think about the alternative) are of equal importance as the balancing criteria. No evaluation or prediction of acceptability by the public or the state is evaluated until comments are received.

#### SUMMARY OF THE REMEDIAL ALTERNATIVES

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Three alternatives were studied for effectiveness, cost and implementability to determine which alternatives should be evaluated further for Area R:

**Alternative 1** provides no change to Area R. This alternative is not protective and has no long-term permanence. No ARARs would apply to this alternative. This alternative has no cost.

**Alternative 2** is protective of human health by reducing risk by informing the site users of the hazards of munitions and what to do if they are encountered. It balances the factors of long-term effectiveness and permanence with short-term effectiveness and implementability. The estimated cost to implement Alternative 2 is \$1,444,000 over a 30-year period, which is significantly lower than Alternative 3.

Alternative 3 is protective by reducing munitions hazards at Area R on the surface and in the subsurface and by informing the residents of the hazards of munitions and what to do if they are encountered. (However no munitions are anticipated to be on the surface, since the area has been mowed for years.) If consolidated demolition is required for munitions found with an explosive hazard, ARARs pertaining to consolidated shots (RCRA CFR Subpart X Miscellaneous Units OB/OD) are applicable. Alternative 3 balances the factors of long-term effectiveness and permanence with short-term effectiveness, implementability, reduction of toxicity, mobility and volume through munitions removal. This alternative reduces the source of munitions in the surface and subsurface in areas where the general public has access. (It does not reduce munitions under the runway, other paved areas, or structures.) The estimated cost to implement Alternative 3 is \$2,594,000 over a 30-year period.

Although not considered part of an alternative, since none of the alternatives would remediate the site to allow for unlimited use/unlimited exposure, Five-Year Reviews will be conducted to monitor whether the chosen alternative remains protective of human health and the environment. A summary of the detailed analysis is shown in Table 3.

Alternatives	Overall Protection of Human Health and the Environment	Compliance with ARARs	Long-Term Effectiveness and Permanence	Reduction of Mobility, Toxicity, or Volume through Treatment	Short-Term Effectiveness	Implement- ability	Cost
Alternative 1: No Action	Not Protective	No ARARs Would Apply	Р	Р	Р	E	E
Alternative 2: Land Use Controls (Educational Awareness) for Area R	Protective	No ARARs Would Apply	G	Ρ	E	E	E
Alternative 3: Surface and Subsurface Munitions Removal in Uninvestigat ed Areas (not covered by structures) and Land Use Controls for Area R	Protective	Complies	VG	VG	VG	E	VG

#### Table 3: Summary Comparison of Remedial Alternatives with CERCLA Criteria

Notes:

ARARs = applicable or relevant and appropriate requirements E = excellent

G = good

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N/A = not applicable P = poor VG = very good

# PREFERRED ALTERNATIVE

Based on evaluation against the above criteria, Alternative 3, Surface/Subsurface Munitions Removal in Uninvestigated Areas (not covered by structures) and Land Use Controls for entire acreage of Area R was determined to be the most favorable of the alternatives evaluated and would best satisfy the remedial action objective for the site.

Alternative 3 presents a remedy based on anticipated land uses. The Corps with concurrence from the Hawaii Department of Health, believes that this alternative would be protective of humans and the environment and would achieve the remedial action objective of minimizing risk from munitions to humans. The Corps may modify the Preferred Alternative in response to public comments or new information.

The Corps believes the Preferred Alternative meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing and modifying criteria.

The Preferred Alternative satisfies the following statutory requirements of CERCLA §121 (b):

- 1. Protects humans and the environment.
- 2. Complies with Applicable or Relevant and Appropriate Requirements.
- 3. Is cost-effective.
- 4. Utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable.
- 5. Satisfies the preference for treatment as a principal element.

# **COMMUNITY PARTICIPATION**

The Corps is requesting public comments on the above **Preferred Alternative** presented in this Proposed Plan for Area R. Written and verbal comments will be accepted at a **public meeting scheduled for** *July 15, 2015* at 6:00 p.m. at Waimea Elementary School, 1225 Mamalahoa Hwy, Kamuela, HI 96743. Written and verbal comments will also be accepted throughout the comment period, which ends *August 14, 2015*. All comments should be sent to Mr. Walter Nagai (contact information presented below).

The Proposed Plan is available in the Thelma Parker Memorial Library throughout the comment period, beginning *July 15, 2015* and ending *August 14, 2015*. Comments received during the public meeting and comment period will be considered in the final decision. This decision will be presented in a Decision Document signed by the Corps. The Corps' responses to public comments will be documented in the "Responsiveness Summary" section of the Decision Document.

The *Remedial Investigation Report for Area R Waikoloa Maneuver Area* provides a comprehensive description of the site history, the details of the Remedial Investigation, the associated risk assessments and their conclusions. The *Feasibility Study Report* outlines and provides a comparative analysis of the possible alternatives. All of the reports, including this Proposed Plan and other project documents are available in the information repository located at the reference desk in the Thelma Parker Memorial Library located at 67-1209 Mamalahoa Hwy, Kamuela, HI 96743.

#### **Contact information**

General Information: http://www.poh.usace.army.mil/Missions/Environmental/FUDS.aspx

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#### Information Repository

Copies of the *Remedial Investigation Report, Feasibility Study Report,* this *Proposed Plan,* and other project documents that comprise the Administrative Record file for this site can be found at the following location. The documents will be available from *July 15, 2015 – August 14, 2015*:

Thelma Parker Memorial Library 67-1209 Mamalahoa Hwy. Kamuela, HI 96743-8429 Telephone: 808-887-6067

# References

Dawson-Environet JF LLC, 2009. Final Site Specific Final Report. October, 2009. Contract #: W9128A-08-C-0012. October, 2009.

Environet, Inc. 2010. Final Site Specific Final Report. Contract #: W9128A-09-D-0002, Task Order #0002. April 30.

Earth Tech Inc., 2002. Final Phase II Engineering Evaluation/Cost Analysis, Former Waikoloa Maneuver Area and Nansay Sites, Island of Hawaii, Hawaii. Report prepared for the US Army Corps of Engineers. January.

Environet, Inc. 2013. Area R Letter Report. August.

Native Hawaiian Veterans (NHV), 2014a. Final Remedial Investigation Report, Former Waikoloa Maneuver Area, Area R.

NHV, 2014b. Feasibility Study Report, Former Waikoloa Maneuver Area, Area R.

The South Kohala Community, 2008. South Kohala Development Plan. Final, 2008.

# **Glossary of Terms**

Administrative Record – the documents that form the basis for the selection of a response action compiled and maintained by the lead agency.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, otherwise known as Superfund)** of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986. This law also establishes criteria for the creation of key documents such as the Remedial Investigation Report, Proposed Plan and Decision Document.

**Decision Document** – The documentation of remedial response decisions at Formerly Used Defense Sites. Concurrence on the Decision Document by U.S. Environmental Protection Agency or the state regulatory agency is sought and the Army approves the document.

**Feasibility Study** – A study undertaken by the lead agency to develop and evaluate options for remedial action. The Remedial Investigation Report data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to a report that describes the results of the study.

**Formerly Used Defense Site** – A facility or site which was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances, for which the Secretary of Defense shall carry out all response actions with respect to releases of hazardous substance from that facility or site.

**Munitions Constituents** – Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

**Munitions Debris** – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

**Munitions and Explosives of Concern** – Specific categories of military munitions that may pose unique explosives safety risks, specifically composed of (a) unexploded ordnance, (b) discarded military munitions, or (c) munitions constituents (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.

**Munitions Response Site** – An area that is known to require a munitions response (investigation, removal action and/or remedial actions).

**Preferred Alternative** – The alternative that, when compared to other alternatives, best meets the Comprehensive Environmental Response, Compensation, and Liability Act evaluation criteria and is proposed for implementation at a site.

**Proposed Plan** – A plan that identifies the preferred remedial alternative for a site and is made available to the public for comment.

**Remedial Investigation** – A process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The Remedial Investigation emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the feasibility study. The Remedial Investigation includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

# **ACRONYMS AND ABBREVIATIONS**

- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
- Corps United States Army Corps of Engineers
- FUDS Formerly Used Defense Sites



# Remember the "R's" of Explosives Safety:

Because of how the military used the site, munitions may remain on site. Munitions may be dangerous and may not be easily recognizable. Never touch, move or disturb something you think may be a munition. Remember the 3Rs of explosives safety.

Recognize - The item you found may be munitions, and munitions may be dangerous. Retreat - Leave the area without touching or moving the object. Report - Call 911 immediately.